

What is claimed is:

1. A method for treating Alzheimer's disease, the method comprising administering to a patient suffering from Alzheimer's disease a therapeutic agent selected from the group consisting of D-cycloserine and a salt of D-cycloserine, wherein the amount of the therapeutic agent is equivalent to 105-500 mg of D-cycloserine per day, and wherein the therapeutic agent is administered to the patient for at least four weeks.
2. The method of claim 1, wherein the therapeutic agent is selected from the group consisting of a sodium salt, a potassium salt, a calcium salt, a magnesium salt, a zinc salt, and an ammonium salt of D-cycloserine.
3. The method of claim 1, wherein the D-cycloserine or salt of D-cycloserine is administered in a dose equivalent to 125-400 mg of D-cycloserine per day.
4. The method of claim 1, wherein the D-cycloserine or salt of D-cycloserine is administered in a dose equivalent to 150-300 mg of D-cycloserine per day.
5. The method of claim 1, wherein the composition is administered orally, intravenously, trans-mucosally, transdermally, ocularly, buccally, sublingually, intraperitoneally, intrathecally, intramuscularly, by a pulmonary route, or by depot preparation.
6. The method of claim 1, wherein the therapeutic agent is D-cycloserine and is administered for at least 6 weeks.
7. The method of claim 1, wherein the therapeutic agent is D-cycloserine and is administered for at least 8 weeks.

8. The method of claim 1, wherein the therapeutic agent is D-cycloserine and is administered for at least 4 months.

9. The method of claim 1, wherein the therapeutic agent is D-cycloserine and is administered for at least 8 months.

10. The method of claim 1, wherein the therapeutic agent is D-cycloserine and is administered for at least 12 months.

11. A method for treating Alzheimer's disease, the method comprising administering to a patient suffering from Alzheimer's disease a therapeutic agent selected from the group consisting of an ester of D-cycloserine, a precursor of D-cycloserine, and alkylated D-cycloserine, wherein the amount of the therapeutic agent is equivalent to 105-500 mg of D-cycloserine per day, and wherein the therapeutic agent is administered to the patient for at least four weeks.

12. The method of claim 11, wherein the therapeutic agent is an ester of D-cycloserine.

13. The method of claim 11, wherein the therapeutic agent is a precursor of D-cycloserine.

14. The method of claim 11, wherein the therapeutic agent is an alkylated D-cycloserine.

15. The method of claim 11, wherein the composition is administered orally, intravenously, trans-mucosally, transdermally, ocularly, buccally, sublingually, intraperitoneally, intrathecally, intramuscularly, by a pulmonary route, or by depot preparation.

16. The method of claim 11, wherein the therapeutic agent is administered for at least 6 weeks.

17. The method of claim 11, wherein the therapeutic agent is administered for at least 8 weeks.

18. The method of claim 11, wherein the therapeutic agent is administered for at least 4 months.

19. The method of claim 11, wherein the therapeutic agent is administered for at least 8 months.

20. The method of claim 11, wherein the therapeutic agent is administered for at least 12 months.

21. A method for treating Alzheimer's disease, the method comprising administering to a patient suffering from Alzheimer's disease
(i) a therapeutically effective amount of a therapeutic agent selected from the group consisting of D-cycloserine and a salt of D-cycloserine; and
(ii) an acetylcholine esterase inhibitor.

22. The method of claim 21, wherein the therapeutic agent is D-cycloserine.

23. The method of claim 21, wherein the therapeutic agent is selected from the group consisting of a sodium salt, a potassium salt, a calcium salt, a magnesium salt, a zinc salt, and an ammonium salt of D-cycloserine.

24. The method of claim 21, wherein the acetylcholine esterase inhibitor is Donepezil or Tacrine.

25. The method of claim 21, wherein the amount of the therapeutic agent is equivalent to 105-500 mg of D-cycloserine.

26. The method of claim 25, wherein the amount of the therapeutic agent is equivalent to 125-400 mg of D-cycloserine per day.

27. The method of claim 26, wherein the amount of the therapeutic agent is equivalent to 150-300 mg of D-cycloserine per day.

28. The method of claim 21, wherein the therapeutic agent and the acetylcholine esterase inhibitor are administered orally, intravenously, trans-mucosally, transdermally, ocularly, buccally, sublingually, intraperitoneally, intrathecally, intramuscularly, by a pulmonary route, or by depot preparation.

29. A method for treating Alzheimer's disease, the method comprising administering to a patient suffering from Alzheimer's disease

(i) a therapeutically effective amount of a therapeutic agent selected from the group consisting of an ester of D-cycloserine, a precursor of D-cycloserine, and alkylated D-cycloserine; and

(ii) an acetylcholine esterase inhibitor.

30. The method of claim 29, wherein the therapeutic agent is an ester of D-cycloserine having an ester group with 1-20 carbon atoms.

31. The method of claim 29, wherein the therapeutic agent is an alkylated D-cycloserine having an alkyl group with 1-20 carbon atoms.

32. The method of claim 29, wherein the therapeutic agent is a precursor of D-cycloserine.

33. The method of claim 29, wherein the acetylcholine esterase inhibitor is Donepezil or Tacrine.

34. The method of claim 29, wherein the amount of the therapeutic agent is equivalent to 105-500 mg of D-cycloserine.

35. The method of claim 34, wherein the amount of the therapeutic agent is equivalent to 125-400 mg of D-cycloserine per day.

36. The method of claim 35, wherein the amount of the therapeutic agent is equivalent to 150-300 mg of D-cycloserine per day.

37. The method of claim 29, wherein the therapeutic agents and the acetylcholine esterase inhibitor are administered orally, intravenously, trans-mucosally, transdermally, ocularly, buccally, sublingually, intraperitoneally, intrathecally, intramuscularly, by a pulmonary route, or by depot preparation.

38. A method for treating Alzheimer's disease, the method comprising administering to a patient diagnosed as suffering from Alzheimer's disease

- (i) a first therapeutic agent selected from the group consisting of D-cycloserine and a salt of D-cycloserine; and
- (ii) a second therapeutic agent selected from the group consisting of antipsychotics, antidepressants, psychostimulants, and Alzheimer's disease therapeutics; wherein the therapeutic agent is equivalent to 105-500 mg of D-cycloserine.

39. A method for treating Alzheimer's disease, the method comprising administering to a patient diagnosed as suffering from Alzheimer's disease

- (i) a first therapeutic agent selected from the group consisting of an ester of D-cycloserine, a precursor of D-cycloserine, and alkylated D-cycloserine; and

(ii) a second therapeutic agent selected from the group consisting of antipsychotics, antidepressants, psychostimulants, and Alzheimer's disease therapeutics; wherein the first therapeutic agent is in an amount equivalent to 105-500 mg of D-cycloserine.

40. A pharmaceutical composition comprising:
(i) a therapeutically effective amount of a therapeutic agent selected from the group consisting of D-cycloserine and a salt of D-cycloserine; and
(ii) an acetylcholine esterase inhibitor.

41. The method of claim 40, wherein the therapeutic agent is equivalent to 105-500 mg of D-cycloserine.

42. The composition of claim 40, wherein the therapeutic agent is selected from the group consisting of a sodium salt, a potassium salt, a calcium salt, a magnesium salt, a zinc salt, and an ammonium salt of D-cycloserine.

43. The composition of claim 40, wherein acetylcholine esterase inhibitor is Donepezil or Tacrine.

44. A pharmaceutical composition comprising:
(i) a therapeutically effective amount of a therapeutic agent selected from the group consisting of an ester of D-cycloserine, a precursor of D-cycloserine, and alkylated D-cycloserine; and
(ii) an acetylcholine esterase inhibitor.

45. The method of claim 44, wherein the amount of the therapeutic agent is equivalent to 105-500 mg of D-cycloserine.

46. The composition of claim 44, wherein the acetylcholine esterase inhibitor is Donepezil or Tacrine.

47. A pharmaceutical composition comprising:

- (i) a first therapeutic agent selected from the group consisting of D-cycloserine and a salt of D-cycloserine; and
- (ii) a second therapeutic agent selected from the group consisting of antipsychotics, antidepressants, psychostimulants, and Alzheimer's disease therapeutics; wherein the therapeutic agent is in an amount equivalent to 105-500 mg of D-cycloserine.

48. A pharmaceutical composition comprising:

- (i) a first therapeutic agent selected from the group consisting of an ester of D-cycloserine, a precursor of D-cycloserine, and alkylated D-cycloserine; and
- (ii) a second therapeutic agent selected from the group consisting of antipsychotics, antidepressants, psychostimulants, and Alzheimer's disease therapeutics; wherein the therapeutic agent is in an amount equivalent to 105-500 mg of D-cycloserine.